



VERIFICATION OF A TRANSLATION

I, Robert J. Patch, state that I am familiar with the French and English languages, and that the attached translation is an accurate translation of French Application No. 98/12826, filed October 13, 1998, from French to English.



Date 8/8/07

Robert J. Patch
745 South 23rd Street
Arlington, VA 22202
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709



26 bis, rue de Saint Pétersbourg
75800 Paris Cedex 08
Telephone: 01 53 04 53 04 Telefax: 01 42 93 59 80

PATENT, UTILITY CERTIFICATE

Intellectual Property Code - Book VI

Cerfa
No. 55-1328

REQUEST FOR GRANT

Confirmation of filing by fax ☐

This form is to be completed in black ink and in block capitals

| Reserved for the INPI DATE OF SUBMISSION OF THE DOCUMENTS 13 OCT. 1998 NATIONAL REGISTRATION 98/12,826 DEPARTMENT OF FILING 75 DATE OF FILING 13/10/98 | | 1. NAME AND ADDRESS OF THE APPLICANT OR THE REPRESENTATIVE TO WHOM THE CORRESPONDENCE IS TO BE ADDRESSED CABINET LAVOIX 2 Place d'Estienne d'Orves 75441 PARIS CEDEX 09 | | | | | | | | | |
|--|--------|--|---------------------------|-------------------|--------|-------------|---------------------------|--|--|--|--|
| 2. APPLICATION <input checked="" type="checkbox"/> patent <input type="checkbox"/> utility certificate Nature of the industrial property right <input type="checkbox"/> divisional application <input type="checkbox"/> conversion of a European patent application <input type="checkbox"/> patent | | No. of permanent power of attorney Correspondent's references Telephone BFF98/0291 53-20-14-20 | | | | | | | | | |
| Compilation of the search report <input type="checkbox"/> deferred <input checked="" type="checkbox"/> immediate The applicant, as a physical person, asks to pay the fee by instalments <input type="checkbox"/> yes <input type="checkbox"/> no | | | | | | | | | | | |
| Title of the invention (maximum 200 characters) Device for acquiring and for transferring information relating to payment means to a banking organization | | | | | | | | | | | |
| 3. APPLICANT(S) name and forenames (underline the surname) or company name France Télécom | | SIREN No. APE-NAF code Legal form | | | | | | | | | |
| nationality/nationalities French | | Country FR | | | | | | | | | |
| Full address(es) 6, Place d'Alleray 75015 PARIS | | | | | | | | | | | |
| If insufficient space, continue on plain paper <input type="checkbox"/> | | | | | | | | | | | |
| 4. INVENTOR(S) The inventors are the applicants <input type="checkbox"/> yes <input checked="" type="checkbox"/> no If the answer is no, provide a separate designation | | | | | | | | | | | |
| 5. REDUCTION OF THE RATE OF FEES <input type="checkbox"/> requested for the first time <input type="checkbox"/> requested prior to filing; attach copy of the favourable decision | | | | | | | | | | | |
| 6. PRIORITY DECLARATION OR APPLICATION FOR THE BENEFIT OF THE FILING DATE OF A PRIOR APPLICATION <table border="1"> <thead> <tr> <th>Country of origin</th> <th>Number</th> <th>Filing date</th> <th>Nature of the application</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="height: 50px;"></td> </tr> </tbody> </table> | | | | Country of origin | Number | Filing date | Nature of the application | | | | |
| Country of origin | Number | Filing date | Nature of the application | | | | | | | | |
| | | | | | | | | | | | |
| 7. DIVISIONS previous to the present application | | No. date No. date | | | | | | | | | |
| 8. SIGNATURE OF THE APPLICANT OR REPRESENTATIVE (name and capacity of the signatory - registration No.) CABINET LAVOIX M. MONCHENY no. 92.1179 M. BOLENSKY no. 92.1186 [signature] | | SIGNATURE OF THE RECEIVING OFFICIAL SIGNATURE AFTER REGISTRATION OF THE APPLICATION AT THE INPI [illegible signature] | | | | | | | | | |



PATENT, UTILITY CERTIFICATE

DESIGNATION OF THE INVENTOR

(If the applicant is not the inventor or
the sole inventor)

PATENTS DEPARTMENT

26bis, rue de Saint-Petersbourg
75800 Paris Cédex 08
Tel: 01 53 04 53 04 - Fax: 01 42 93 59 30

NATIONAL REGISTRATION NO.

98/12,826

TITLE OF THE INVENTION: Device for acquiring and for transferring
information relating to payment means to a banking
organization

THE UNDERSIGNED

France Télécom
6, Place d'Alleray 75015 PARIS FRANCE

DESIGNATE(S) AS INVENTOR(S) (surname underlined, forenames, address):

MILLION-ROUSSEAU Bruno
4bis, Chemin de Puits des Vignes
69450 SAINT CYR AU MONT D'OR FRANCE

JUNKER Christian
9, rue de Clos de Pontoise
95170 DEUIL LA BARRE FRANCE

NOTE: In exceptional cases, the name of the inventor may be followed by that of the company to which he belongs (membership company) when the latter is other than the company which is the applicant or proprietor.

Date and signature(s) of the applicant(s) or of the representative

Paris, 13 October 1998

CABINET LAVOIX
M. MONCHENY no. 92.1179
M. OBOLENSKY no. 92.1186

[signature]

DOCUMENT CONTAINING CORRECTIONS

| (FRENCH) PAGE(S) OF THE DESCRIPTION OR OF THE CLAIMS OR SHEET(S) OF DRAWINGS | | | R.M.* | DATE OF THE CORRESPONDENCE | DATE STAMP OF THE CORRECTOR |
|---|---------|-------|-------|----------------------------------|-----------------------------------|
| Amended | Omitted | Added | | | |
| 7, 8 | | | YES | 22/10/99 | 18 MAY 2000 A J P |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

* A change made in the wording of the original claims, unless the change derives from the provisions of Article R.612-36 of the Intellectual Property Code, is indicated by the reference "R.M." (amended claims).



- 1 -

The present invention relates to a device for acquiring and for transferring information relating to payment means to a banking organization.

Conventionally, such devices comprise means for
5 reading the payment means connected to a central processing unit, and means for dialing telephone numbers associated with a modem for establishing a telephone link with the server center.

10 An exemplary device of this type consists of electronic payment terminals.

These terminals, located at a trader's, make it possible to perform transaction by bank card, securely.

They comprise a fixed base furnished with means of connection to a telephone line and a terminal proper
15 equipped with a card reader and with a keypad making it possible to enter the amount of the transaction to be performed and enabling the card bearer to identify himself/herself.

Electronic payment terminals require the establishment of a telephone link with the server center of a banking organization, on the one hand, to obtain an authorization number in respect of transactions pertaining to sums greater than a pre-determined threshold value, currently fixed at FF 600 and, on the
20 other hand, to periodically credit the trader's bank account with the sums corresponding to the transactions performed.

Under certain circumstances, for example in the case of a travelling trader, or when the trader has a stand at a trade show, that is to say in situations in
30 which no telephone socket is available to the trader, it is not possible to obtain, with the aid of the electronic payment terminal, a prior authorization number and to credit his account with the takings received.

35 A trader can also be confronted with this same problem when he wishes to use a device for reading and verifying checks which also requires the establishing of a telephoning link with a banking organization.

- 2 -

The aim of the invention is to alleviate these drawbacks.

Its subject is therefore a device for acquiring information relating to payment means and for transferring this information to a server center of a banking organization, of the abovementioned type, characterized in that the means for dialing telephone numbers and the associated modem consist of elements of wireless telephony circuits.

The expression "element of wireless telephony circuit" is understood to mean, within the framework of the present description, circuits of a mobile or cellular telephone apparatus, that is to say, of a telephone set communicating over the airwaves with a relay or base station covering a geographical zone of the public telephone network.

The device for acquiring and for transferring information relating to payment means, according to the invention, can furthermore comprise one or more of the following characteristics, taken in isolation or according to all technically possible combinations:

- it furthermore comprises second means for dialing telephone numbers and a second modem associated with these means, consisting of elements of wired telephony circuits, and a switching facility for selectively placing the central unit in communication with the first or second means for dialing telephone numbers;

- the switching facility consists of a switching facility which can be actuated manually by a user;

- the switching facility comprises voltage detection means provided in a circuit for interfacing with a switched telephone network;

- said first means for dialing telephone numbers and the associated modem are disposed in a box separate from the remainder of the device, the box comprising, connected at the input of these latter, a circuit for emulating a switched telephone network associated with

- 3 -

means for detecting telephone numbers dialed by said second means for dialing and means for matching the speeds of transmission of the data transmitted between the first and second means for dialing telephone numbers;

- the matching means consist of means of temporary storage of the data;

- the emulating circuit is connected to the second means for dialing telephone numbers by a wireless link, in particular an infrared link of the IrDA type;

- the first means for dialing telephone numbers are connected to a wireless telephone set;

- the first means for dialing telephone numbers are connected to the telephone set by a wireless link, in particular an infrared link of the IrDA type;

- it constitutes an electronic payment terminal;

- it constitutes a device for reading and verifying checks.

Other characteristics and advantages will emerge from the following description, which are given merely by way of example, and with reference to the appended drawings in which:

- figure 1 is a perspective diagrammatic view of an exemplary embodiment of a device for acquiring and transferring information, according to the invention;

- figure 2 is a schematic diagram of the device of figure 1; and

- figure 3 is a schematic diagram showing the make-up of another embodiment of a device for acquiring and transferring information relating to payment means.

Represented in figure 1 is a device for acquiring and transferring information relating to payment means.

In the exemplary embodiment represented in this figure, the device, designated by the general numerical reference 10, consists of an electronic payment terminal for, as is conventional, reading information

- 4 -

contained in a payment bank card (not represented) such as the bank references and the name of the card bearer and for transferring this information to the server center of a banking organization, accompanied by
5 information corresponding to a transaction to be performed.

The device 10 comprises, as is conventional, a terminal proper 12 equipped with readers 14 for chip and magnetic-strip bank cards, and a keypad 16 making
10 it possible to manually enter the data corresponding to the transactions to be performed, and a base 18 on which the terminal 12 rests, in the idle position.

As may be seen in figure 2, the base 18 comprises a central data processing unit 20 to which
15 are connected first means for dialing telephone numbers 22 and second means for dialing telephone numbers 24.

The first and second means for dialing telephone numbers 22 and 24 are each associated with a modem, 26 and 28 respectively, catering, on the one
20 hand, on transmission, for the modulation of the data emanating from the processing unit 20 with a view to its transmission over telephone networks and, on the other hand, on reception, for the demodulation of the data received from the banking organization with a view
25 to its transmission to the processing unit 20.

The first, 22, and second 24, means for dialing telephone numbers are means of conventional type, appropriate for the use envisaged. They will therefore not be described in detail.

30 It will however be noted that the first means 22 for dialing telephone numbers and the modem 26 are made from elements of wireless telephony circuits, that is to say, they are able to cater for the keying and transmission of the numerical data over a "mobile" or
35 "wireless" telephony network, being thus able as a function of the standard used for the transmission of the data.

- 5 -

It will also be noted that the second means 24 for dialing telephone numbers consist of elements of telephone circuits of the DTMF type allowing dialing on the public switched telephone network.

5 Two interface circuits, 30 and 32, respectively connected to the first and second means for dialing telephone numbers and to the associated modem cater for the connection of the device, on the one hand, to the wireless telephony telephone network and, on the other
10 hand, to the switched telephone network.

Specifically, the first interface circuit 30 is intended to allow the plugging in of a cellular telephone set 34 (figure 1), whilst the second interface circuit 32 will be connected up directly to a
15 telephone line.

The circuit of the base is completed with a switching circuit 36 for selectively placing the data processing unit 20 in communication with the first or second means for dialing telephone numbers with a view
20 to exchanging information with a server center, after establishing a telephone communication, either via the switched telephone network, of via the "mobile" telephony network.

According to a first embodiment, the switching
25 circuit 36 consists of a selector which can be manually actuated by a user, for example by means of a pushbutton, as a function of the chosen mode of transmission.

As a variant, the switching circuit 36 caters
30 for detection of the voltage present at the level of the second interface circuit 32, that is to say at the level of the zone of connection thereof to the switched telephone network, by using an appropriate voltage detector, and places the processing unit 20 in
35 communication with the switched telephone network in the event of detecting a voltage equal to 48 V for France for example, corresponding to the voltage conventionally present on a telephone line, and simul-

- 6 -

taneously disconnects the unit 20 from the first interface circuit 30.

In the exemplary embodiment just described with reference to figure 2, the assembly of elements allowing the establishment of a wireless telephone link, by way of a cellular telephone set, with the server center of a banking organization are built into the base, to which the cellular telephone set will be linked.

It would be possible, as a variant, to build the telephone set into the base, by furnishing the base with all the telephone circuits required for establishing a telephone link.

According to another exemplary embodiment, represented in figure 3, the first means for dialing telephone numbers and the associated modem are incorporated into a separate box which will be plugged into the telephone socket of the base of a conventional electronic payment terminal, the second means for dialing telephone numbers and the modem being disposed in the base.

In this figure, elements identical to those of figure 2 bear the same reference numbers.

As may be seen in this figure, according to this exemplary embodiment, the device comprises, at input, a circuit 38 emulating the fixed network, of the conventional type, catering for reception of the data delivered by the base 18 of the electronic payment terminal 10, and connected to a circuit for detecting telephone numbers dialed by the means for dialing telephone numbers built into the base, designated by the general numerical reference 40 and which are associated with a modem 42, likewise of conventional type.

The detection circuit 40 and the modem 42 are connected to means 44 for dialing telephone numbers and to a corresponding modem 46, which are identical to the first means for dialing telephone numbers 22 and to the

- 7 -

modem 26 of figure 2, themselves connected to an interface circuit 48 to which a cellular telephone set (not represented) will be connected.

5 A circuit 50 for matching the speeds of transmission of the data transmitted between the first and second means for dialing telephone numbers, disposed respectively in the separate box and in the base, is disposed, between, on the one hand, the detection circuit 40 and the associated modem 42 and, 10 on the other hand, the circuit for dialing telephone numbers 44 and the associated modem 46.

This circuit 50 incorporates means of temporary storage of the data transmitted between the base and the mobile telephone network so as to match the speed 15 of transmission of the data conveyed over the fixed switched telephone network to those of the mobile telephone network.

It will be appreciated that this exemplary embodiment makes it possible to transmit data toward a banking organization, using a cellular telephone whilst 20 also using a payment terminal of conventional type.

In the exemplary embodiments described above, the cellular telephone set has been regarded as being connected, by means of a wire link, to the corresponding interface. 25

It would however be possible, as a variant, to cater for communication between the cellular telephone and the device by using a wireless link, for example an infrared link of the IrDA type.

30 Likewise, it would also be possible, in the exemplary embodiment described with reference to figure 3, to envisage the use of such a wireless link between the electronic payment terminal and the box.

The invention is not limited to the embodiments 35 described, in which the device consists of an electronic payment terminal.

Indeed, the device can also be contrived in the form of a device for reading and verifying checks so as

- 8 -

to read the references which a check bears and to transmit them towards a banking organization with a view to verifying, for example, that the check is not subject to a stop instruction.

CLAIMS

1. A device for acquiring information relating to payment means and for transferring this information to a server center of a banking organization, the device comprising means (14) for reading the payment means connected to a central processing unit (20) and means (22) for dialing telephone numbers associated with a modem (26) for establishing a telephone link with the server center, characterized in that the means (22;44) for dialing telephone numbers and the associated modem (26;46) consist of elements of wireless telephony circuits.
2. The device as claimed in claim 1, characterized in that it furthermore comprises second means (24) for dialing telephone numbers and a second modem (28) associated with these means, consisting of elements of wired telephony circuits, and a switching facility (36) for selectively placing the central unit (20) in communication with the first (22) or second (24) means for dialing telephone numbers.
3. The device as claimed in claim 2, characterized in that the switching facility (36) consists of a switching facility which can be actuated manually by a user.
4. The device as claimed in claim 2, characterized in that the switching facility (36) comprises voltage detection means provided in a circuit for interfacing with a switched telephone network.
5. The device as claimed in any one of claims 2 to 4, characterized in that said first means (44) for dialing telephone numbers and the associated modem (46) are disposed in a box separate from the remainder of the device and in that the box comprises, connected at the input of these latter, a circuit (38) for emulating a switched telephone network associated with means (40) for detecting telephone numbers dialed by said second

- 10 -

Sheet before
correction

means (24) for dialing and means (50) for matching the speeds of transmission of the data transmitted between the first and second means for dialing telephone numbers.

5 6. The device as claimed in claim 4, characterized in that the matching means (50) consist of means of temporary storage of the data.

7. The device as claimed in one of claims 5 and 6, characterized in that the emulating circuit (38) is
10 connected to the second means for dialing telephone numbers by a wireless link, in particular an infrared link of the IrDA type.

8. The device as claimed in any one of claims 1 to 7, characterized in that the first means for dialing
15 telephone numbers are connected to a wireless telephone set (34).

9. The device as claimed in claim 8, characterized in that the first means for dialing telephone numbers are connected to the telephone set (34) by a wireless
20 link, in particular an infrared link of the IrDA type.

10. The device as claimed in any one of claims 1 to 9, characterized in that it constitutes an electronic payment terminal.

11. The device as claimed in any one of claims 1 to
25 9, characterized in that it constitutes a device for reading and verifying checks.

CLAIMS

1. A device for acquiring information relating to payment means and for transferring this information to a server center of a banking organization, the device comprising means (14) for reading the payment means connected to a central processing unit (20) and means (22) for dialing telephone numbers consisting of elements of wireless telephony circuits associated with a modem (26) for establishing a telephone link with the server center, characterized in that it furthermore comprises second means (24) for dialing telephone numbers and a second modem (28) associated with these means, consisting of elements of wired telephony circuits, and a switching facility (36) for selectively placing the central unit (20) in communication with the first (22) or second (24) means for dialing telephone numbers.
2. The device as claimed in claim 1, characterized in that the switching facility (36) consists of a switching facility which can be actuated manually by a user.
3. The device as claimed in claim 1, characterized in that the switching facility (36) comprises voltage detection means provided in a circuit for interfacing with a switched telephone network.
4. The device as claimed in any one of claims 1 to 3, characterized in that said first means (44) for dialing telephone numbers and the associated modem (46) are disposed in a box separate from the remainder of the device and in that the box comprises, connected at the input of these latter, a circuit (38) for emulating a switched telephone network associated with means (40) for detecting telephone numbers dialed by said second means (24) for dialing and means (50) for matching the speeds of transmission of the data transmitted between the first and second means for dialing telephone numbers.

- 10 -

Corrected sheet

5. The device as claimed in claim 4, characterized in that the matching means (50) consist of means of temporary storage of the data.

6. The device as claimed in one of claims 4 and 5,
5 characterized in that the emulating circuit (38) is connected to the second means for dialing telephone numbers by a wireless link, in particular an infrared link of the IrDA type.

7. The device as claimed in any one of claims 1 to
10 6, characterized in that the first means for dialing telephone numbers are connected to a wireless telephone set (34).

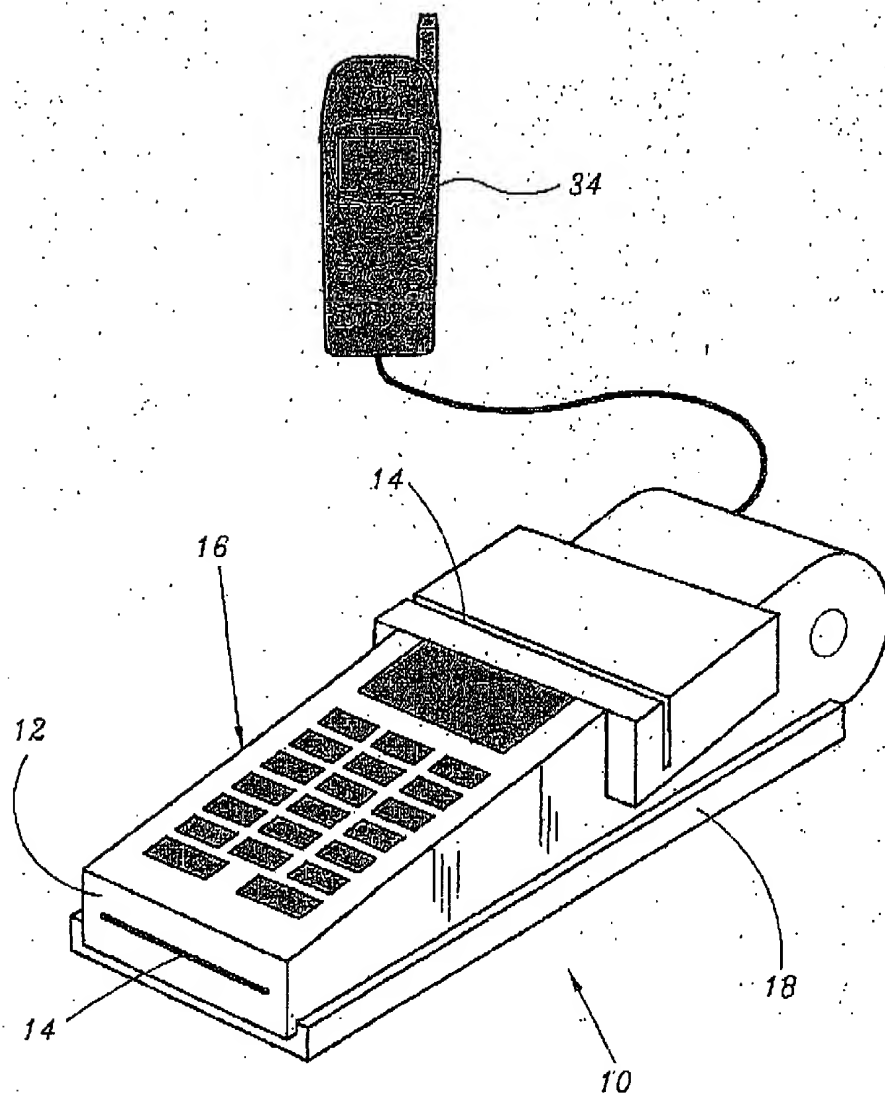
8. The device as claimed in claim 7, characterized in that the first means for dialing telephone numbers
15 are connected to the telephone set (34) by a wireless link, in particular an infrared link of the IrDA type.

9. The device as claimed in any one of claims 1 to 8, characterized in that it constitutes an electronic payment terminal.

20 10. The device as claimed in any one of claims 1 to 8, characterized in that it constitutes a device for reading and verifying checks.

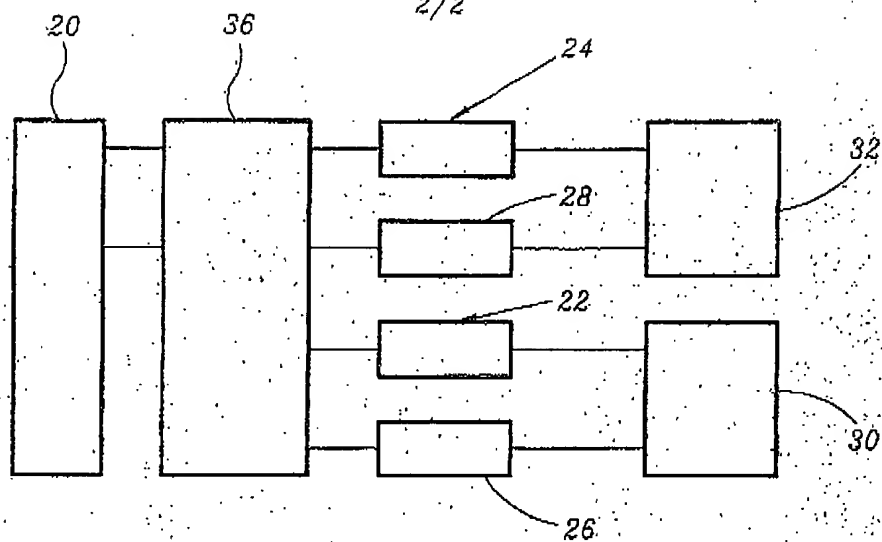
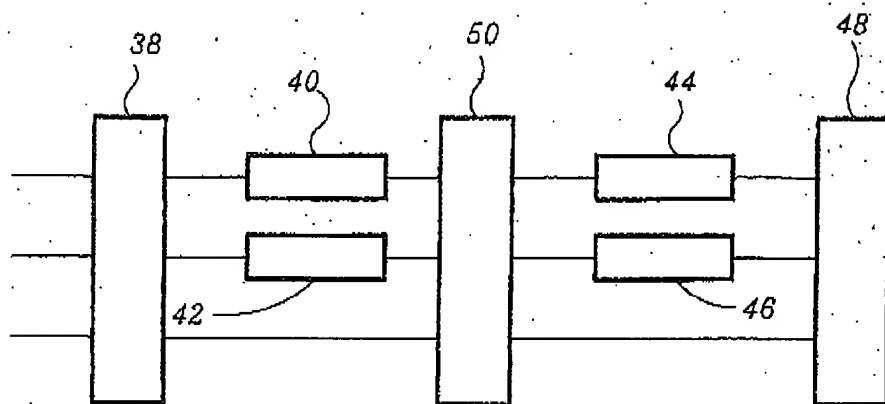


1/2

**FIG. 1**



2/2

**FIG. 2****FIG. 3**